

BAER. (B.F.)

[With the Compliments of the Author.]

## REPORT OF SOME RECENT CASES

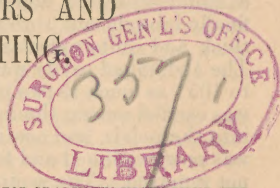
OF

# ABDOMINAL SECTION FOR THE REMOVAL OF TUMORS, OF UNUSUAL INTEREST REGARDING THE CHARACTER OF THE TUMORS AND THE METHOD OF OPERATING

BY

B. F. BAER, M.D.,

PROFESSOR OF GYNECOLOGY IN THE PHILADELPHIA POLYCLINIC AND COLLEGE FOR GRADUATES IN MEDICINE, ETC.



*presented by the author*

### TWO CASES OF MULTILOCULAR OVARIAN CYSTOMA OF UNUSUAL SIZE AND VERY RAPID GROWTH.<sup>1</sup>

CASE I.—Mrs. X. was sent to me by Dr. J. A. Clark, of Bedford, Pa., and on July 31, 1888, entered my private hospital. She is æt. twenty-eight years; married; has had two children after normal labors, the youngest being six years of age. About nine months previous to this date she was attacked with severe pain in the right ovarian region and was confined to bed for several weeks. Her menses had always been regular, but at this time the flow was profuse and continued two weeks. Soon after this attack of pain and metrorrhagia she noticed a swelling in the painful region, on the right side. She rapidly increased in size and began to lose flesh, and, at intervals, to have attacks of pain and metrorrhagia similar to the one noted above, the flow on several occasions continuing for a month. Her abdomen was enormously distended, especially in the upper portion. It was rather symmetrical, dull on percussion all over the anterior and lateral portion, except in the lumbar regions, where slight resonance was obtained. There was fluctuation in the lower portion, but in the upper portion it was very obscure. The skin on the lower surface of the abdomen was in a condition of elephantiasis.

Vaginal examination revealed the uterus slightly retroverted, rather mobile, and gave a sound measurement of three inches. The lower surface of the tumor could just be felt by the vaginal examination.

The patient had a very weak pulse, indeed it could not be felt at all at the left wrist, and she had great dyspnoea on the slightest exertion.

Operation was performed on August 2d. I was assisted by Drs. John B. Bowen, G. H. Franklin, J. A. Clark, J. S. Baer, and H. C. Bloom. An incision three inches in length was made in the usual position. The skin at the point of the incision was fully half an inch thick and very vascular, and considerable subcutaneous adipose tissue was present. As soon as the tumor was reached it presented the nacreous appearance common to ovarian growths, but it was found to be closely adherent to the abdominal wall. After separating as

<sup>1</sup> Reprinted from the Transactions of the Obstetrical Society of Philadelphia.

far as the fingers could reach, the tumor was punctured with Tait's large trocar, and about four gallons of greenish fluid drained away; but only the lower portion of the tumor collapsed; the greater and upper portion remained distended as before. This was punctured in a number of places without removing the instrument from the cavity which had been drained, but nothing more flowed. The opening in the tumor was now enlarged, the hand introduced, and the multilocular condition broken down, large pieces of semi-solid substance being torn loose from the cavity of the tumor, and brought away, together with a great deal of semi-fluid *débris*. As soon as room was gained the hand was carried outside the tumor, when it was found to be adherent to the liver, stomach, and everything with which it came in contact. These adhesions were carefully separated, and after considerable effort the remainder of the tumor was finally brought out through the incision. The pedicle, which was found to be thick and quite vascular, was transfixed and ligated, and the tumor cut away. The abdominal cavity was irrigated with filtered, boiled water, which had cooled to 105°, as much as two gallons being used in the irrigation. The irrigating tube was carried among the intestines and upward to the stomach and liver and then into the pelvis, and continued until the water returned clear. The right ovary was now examined and found to be quite small and in apparent health. It was not removed. The wound was next closed around a drainage tube. There was considerable shock when the great mass was finally removed. The pulse could not be felt at either wrist, and it was two days before it returned to the wrist, although the patient seemed to be doing well.

The usual after-treatment was carried out, and the patient has made an excellent recovery. She went home (250 miles) on the twenty-seventh day, where she is in good health. There was not the slightest violence in the reaction. The patient appeared to be convalescent from the beginning, her temperature never rising above 100°. The drainage tube was removed on the second day.

The tumor was a rapidly growing multilocular cyst, and weighed ninety pounds.

CASE II.—On September 5, 1888, I was summoned to Lock Haven, Pa., by Dr. R. Armstrong, to see a case of abdominal tumor which he stated was in such extreme condition that he feared she might not live until my arrival.

I saw the patient on September 6th. She was twenty-one years of age and single; puberty had occurred at twelve, and menstruation had always been profuse, coming on every three weeks, and always attended with some pain; but she did not consider this abnormal, and so far as she knew was perfectly well until *four months* previous to the above date. In the latter part of April of this year, after unusual exertion about the house, which was being repaired, she was suddenly attacked with cramp-like pains in the right iliac region, so severe as to alarm the neighbors by her outcries. This attack occurred about the time of her expected menstruation, which had not yet appeared, and continued until the flow occurred, when she gained considerable relief. But she remained ill from that time, being able to go about, however, in the intervals between the series of attacks of pain of similar character, which she had had at intervals since the one described above. Within two weeks after the first attack she noticed that her abdomen was increasing in size in the painful region, and from that time to the date at which I saw her, just *four months*, her abdomen had grown to an enormous size.

I found her occupying a semi-recumbent posture and breathing with difficulty. She was emaciated to such a degree and the tumor was of such size that she was almost hidden from view beneath it. The surface of the abdomen was purple from interference with the capillary circulation and the veins were greatly distended. The abdomen was symmetrical and smooth. Fluctuation was rather obscure. There was dulness on percussion all over the anterior and lateral surfaces of the tumor, except at a point far back in the left lumbar region, where slight resonance was found. On the upper right border of the tumor in



the region of the liver, there was an apparently solid mass, shaped somewhat like the liver, suggesting the possibility that the cyst had grown from that organ. This was given more prominence on account of the great rapidity of the growth. The patient was unable to retain anything on her stomach, even liquid food in small quantity being regurgitated, and she stated that she had not slept, except at short intervals, for several weeks. Her bowels were constipated, and the urine was passed frequently and in small quantity. Her pulse was 140 and very feeble. She was indeed in a very extreme condition, and the outlook for successful operative measures was anything but flattering. Her expression was an appealing one, and she begged to be relieved. Arrangements for operation were at once commenced.

A tablespoonful of whiskey was given and repeated in two hours, just before the administration of the anæsthetic. A room opposite to the one occupied by the patient was put in as good aseptic condition as possible in the limited time, and the patient carried to it after etherization, and the operation begun. I was ably assisted by Drs. Armstrong, Ball, and Watson, of Lock Haven.

An incision two inches in length was made midway between the umbilicus and pubis. As soon as the tumor was exposed to view I recognized the characteristic surface of an ovarian cyst. The surface of the cyst was adherent to the peritoneum. After separating the adhesions as far as I could reach with my fingers, I plunged a large trocar into the tumor. But the contents were semi-solid. I therefore cut through the cyst wall and proceeded to break up and remove the contents. It was further found, when the tumor had been sufficiently diminished, that it was adherent to everything it touched, more especially at its upper portion, to the liver, stomach, and other viscera; but the adhesions were weak, and within ten minutes from the time the incision was made the tumor was removed, and the pedicle, which was rather thick and vascular, was ligated. The omentum was drawn out with the tumor, and was so firmly adherent to its wall that it was ligated and amputated. The friable cyst wall was ruptured in many places, and a great deal of the viscid semi-fluid material escaped into the abdominal cavity, but I did not lose time in trying to prevent this.

When the tumor was removed, what was left of the patient was an exceedingly small portion. The emaciated abdominal walls lay close to the spinal column and sunk into the pelvis. She looked more literally "nothing but skin and bones" than I had ever before seen.

The abdominal cavity was thoroughly washed out by irrigation through a fountain syringe, and I was careful to pass the nozzle high up among the intestines and the under surface of the liver and diaphragm. When the water returned clear the incision was closed around a drainage tube and the patient returned to bed in a better condition as to pulse and general appearance than she was before the operation. She did not show any evidence of shock, and was conscious almost as soon as she was placed in bed, manifesting at once an interest in her condition. Her body was so emaciated that it was necessary to pack with cotton about the pelvis and along the spinal column, as the bones almost projected through the skin, and at several places bed-sores were apparent.

The right ovary seemed even smaller than its natural size, and was apparently healthy. It was, therefore, not removed.

The after history of the case was without event. Her temperature did not rise above 100°, and was normal on the third day after the operation. The pulse gradually diminished and was normal on the fifth day. The drainage tube was removed within thirty-six hours after the operation. The sutures were removed by Dr. Armstrong on the eighth day, when union was found complete, except at the lower portion where the drainage tube had been, and this soon healed. She began taking solid food on the third day, and on the fourth day her bowels were moved.

The tumor weighed seventy-five pounds.



The points of considerable interest in these cases are the location, character, and severity of the early symptoms, as well as the location of the tumor when first noticed (on the right side, while the tumors were of the left ovary, the right being in perfect health); the large size and very rapid growth of the tumors; the rapid recovery of the patients, although in the extreme condition, especially of the case last mentioned; the fact that the two cases were alike in nearly all particulars, the only difference being that in the second case the rapidity of the development was much greater, and the severity of the symptoms likewise greater; and, lastly, the method of removal of the tumors, that is, the breaking up of the semi-solid contents with the hand, thereby permitting their removal through a very short incision. This method, however, is not without danger, as was forcibly illustrated by a case which occurred in my practice several months ago. In this case the friable wall of the main cyst had ruptured, and some coils of intestine were found in the cavity and closely adherent to the more solid portion of the contents. Very careful manipulation was necessary to separate the bowel, which was finally done after considerable time had been spent in the effort. However, when the cyst has not previously ruptured the procedure is a safe one when due care is observed.

#### A CASE OF BROAD-LIGAMENT OR PAROVARIAN CYST, WHICH HAD BEEN TAPPED SEVEN TIMES IN SEVEN YEARS, REMOVED BY ENUCLEATION.<sup>1</sup>

Miss A. was sent to me by Dr. S. S. Smith, of Driftwood, Pa., and entered my private hospital on October 3, 1888. She is single, forty-four years of age; had enjoyed good health until eight years ago, when she found that her abdomen was increasing in size. She also complained of a peculiar pain, "pulling down in the pelvis," as she described it. Her abdomen continued to increase in size, until she had such difficulty in breathing that she could not walk upstairs without great dyspnoea occurring. She was tapped on August 2, 1882, and four gallons of fluid "as clear as spring water" removed. She does not think she lost any flesh during the early development of the tumor. In nine months she was tapped again, and three gallons of fluid removed. Between the first and second tappings she lost considerable flesh. At about the same interval she was tapped again, and three gallons of fluid removed. She was tapped yearly since August 2, 1882—seven times in all—the last tapping occurring in April, 1888.

Two or three years ago she began to flow more freely at her periods, until they became so profuse that she would flow as long as a month at a time. About the same time she noticed that there was a projection from the vulvar orifice which would become larger if she were on her feet and retained her water, and diminish in size after the bladder was emptied (probable cystocele). She presents an appearance of considerable emaciation, and states that she is rapidly losing strength.

Inspection shows the abdomen to be distended to about the size of the sixth month of gestation, and symmetrical. The abdominal wall is very loose and flaccid. There is a circular scar midway between the umbilicus and pubis; and, on questioning, the patient explains that four years ago she had a "running sore," which continued about two years. The suppuration followed one of the tappings, and took place from the puncture. Palpation of the abdomen shows a loose, thin-walled cyst in the cavity, which does not seem to be adherent to the abdominal wall. Fluctuation marked.

Inspection of the vulvar orifice shows a cystocele presenting, about the size of a duck's egg, and also an inflammatory swelling of the left labia majora. By

<sup>1</sup> Reprinted from the Transactions of the Obstetrical Society of Philadelphia.



vaginal touch the cervix is found to be near the orifice of the vagina, and quite small. The lower portion of the tumor is felt very distinctly posterior to the uterus and low down in the pelvis. The uterus is pushed forward and to the right, and is elevated to a position above the right groin.

The sound passes through the centre of the body last described to a depth of four inches, and shows it to be positively the uterus. The tumor appears to have pelvic attachments below the uterus, as though it might be an intraligamentous cyst.

Operation, October 6, 1888. Incision two inches. When the tumor was exposed to view, it was found to be firmly adherent at several places to the anterior abdominal wall, and at a point opposite to the scar (seat of former suppurating fistulous opening noted above) it was found that the fimbriated extremity of the Fallopian tube was attached. It was this attachment of the extremity of the tube which had probably caused the elevation of the womb, as that organ seemed to be suspended from the point noted, the Fallopian tube extending from this point downward over the tumor to the uterus, forming a portion of the wall of the tumor. It was also noticed that the outer and upper wall of the tumor was apparently closely adherent to the intestines. So closely related was the tumor to the intestines that it was necessary to carefully select a place where puncture could be made without wounding the bowel. About two gallons of thin fluid, rather straw-colored, was evacuated, when the cyst entirely collapsed. On attempting to draw it out it was found to be so deeply attached that it could not be withdrawn. The upper portion of the cyst-wall seemed to consist entirely of the intestines which escaped through the incision when traction was made upon the cyst. They were hurriedly returned, and the fingers now carried downward toward the base of the tumor, when it was found that the entire pelvic peritoneum of the left side was lifted up—that is, the tumor was entirely subperitoneal, and without a pedicle.

A condition now presented itself which renders this case one of extreme interest. The base of the tumor was so broad, vascular, and so closely attached to the intestines that to have begun to enucleate below would have been hazardous on account of the danger of rupturing the bowel, as well as from hemorrhage, which would probably have been great from the opening of large bloodvessels in the broad ligament. I determined that it would be best in this case to begin to enucleate at the point of the trocar-puncture, and it was found, much to our gratification, that the cyst was readily separated from its outer or peritoneal wall. So readily was this done that it was unnecessary to ligate a single bloodvessel, and the enucleation was accomplished within ten minutes. It was found that the lower surface of the cyst extended down to the floor of the pelvis, below the uterus. After the enucleation was completed, the entire peritoneal covering collapsed and disappeared. It contracted so quickly as to make it difficult for me to find its former cavity for the purpose of irrigating it, which was next done, a number of small clots being washed away.

The thickened Fallopian tube was next ligated and cut away, but the tumor itself was entirely without pedicle and monocystic, as you will see in this beautiful specimen. After irrigating, the wound was closed around a small drainage-tube, and the patient returned to bed, showing some evidence of shock from the operation, from which she soon rallied.

The drainage-tube was removed within thirty-six hours. During the third and fourth days the urine was found to contain pus and blood; but, on investigation, it was determined that it probably originated from the former cystitis, the result of the cystocele. The bladder was washed out twice daily with carbolyzed water, and she soon recovered from this condition. She went home on the twenty-eighth day.

In my experience, this case is unique. The cases of broad-ligament cyst requiring enucleation with which I have met have been such as to necessitate the application of many ligatures and pressure-forceps to control the



hemorrhage during enucleation. Whether this was because I formerly began to enucleate near the base of the tumor by breaking through the outer covering, or whether it is seldom that we meet with a tumor so easily enucleated as this one, I do not know, but I lean rather to the latter view. My experience with this case, however, will lead me to endeavor in future to begin the enucleation high up, at the top and less-vascular portion of the cyst wall.

It was long ago pointed out by Bantock that, in broad-ligament or parovarian cyst, the peritoneal covering could be readily separated from the cyst proper. This serves to distinguish it from cyst of the ovary, the outer wall of which cannot be separated from the covering beneath it. While this was an intra-ligamentary cyst, it was not that form of cyst which is described by Doran as originating in the hilum of the ovary, and containing papillary growths, several specimens of which I have exhibited to this Society.

The history of this case shows that tapping does not always cure parovarian cysts; and it also shows the risk of tapping. There is no doubt that the Fallopian tube was wounded by the puncture which was followed by the prolonged suppuration.

---

## REPORT OF A CASE OF NON-PAPILLARY INTRA-LIGAMENTOUS CYST, WITH SPECIAL REFERENCE TO THE METHOD OF OPERATING; ENUCLEATION OF THE ENTIRE TUMOR IN THE RIGHT BROAD LIGAMENT, BUT OF THE LINING MEMBRANE ONLY OF THAT IN THE LEFT.<sup>1</sup>

SESSILE tumors, whether cystic or solid, are always more or less dreaded by the operator, because of the greater difficulty and danger attending their removal, and also, because, in the case of sessile cysts, the result as to the permanent relief of the patient is less certain than where the tumor has a pedicle. Clinically and pathologically, therefore, these cases are of great interest and importance.

Pain and hemorrhage are the important subjective symptoms. The former is usually present, sometimes in great severity; the latter is at times alarming in the quantity of blood lost and in the frequency of its occurrence. This is not surprising when we consider the close relation which these tumors sustain to the uterus and to the other pelvic organs and tissues. The wedging and pressure which result from the growth of the tumor in the limited space produce great congestion of the bloodvessels from stasis. The uterus becomes enlarged and softened in consequence, and metrorrhagia follows; but the hemorrhage is conservative to a certain degree in relieving the distended vessels, probably averting rupture of a vein in the broad ligament or in the tumor. The pain which results from the tension and stretching of the nerves involved is also relieved or modified by the depletion following a free hemorrhage from the womb. But the flow once started does not always remain within the conservative line; it sometimes becomes uncontrollable and results in acute and serious anæmia.

According to Doran, sessile cysts which arise from the hilum of the ovary or from the Wolffian relics in the broad ligament are usually papillomatous; but that non-papillomatous sessile cysts infiltrating the broad ligament are not infrequently met with is shown by the following statement from that author: "In twenty-four cases, where I assisted at the operation, sessile cysts infiltrating the broad ligament were removed, more or less completely, but their origin could not be ascertained; none of these contained glandular growths, most were multilocular, but papillomatous growths did not exist (*Tumors of the Ovary*, etc., p. 68)." Further, the ordinary pedunculated multilocular cyst of the

<sup>1</sup> Reprinted from the Transactions of the Obstetrical Society of Philadelphia.



ovary sometimes contains papillomatous growths, the result possibly of stray Wolffian relics. I have presented at least one such specimen to this Society and I have seen others. On the other hand, the multilocular ovarian cyst without papillomatous material has been found, in rare instances, to have invaded the hilum and broad ligament in its growth. Doran records two such cases. He says: "I have seen two cases where a sessile cystic tumor of the ovary was removed, and this proved to be an undoubted case of glandular cystic disease invading the hilum and the broad ligament."

The case which I here report is probably another instance of this pathological anomaly.

Mrs. X. was sent to me by Dr. O. H. Adams, of Vineland, N. J., and entered my private hospital in April, 1887. She was thirty-two years of age, married, and had had three children, the last two (twins) eight years ago. Following her last labor she had puerperal mania, which necessitated her confinement in an insane asylum during four months.

Four years ago she began to have attacks of sharp pain in the right ovarian region, radiating to the groin and down the anterior portion of the thigh. The pain was intermittent in character and cramp-like, lasting hours at a time, and was usually followed by a purulent, fetid discharge from the vagina, which would afford her great relief. At other times the attack would end with a profuse metrorrhagia, which would leave her pale and weak, but free from pain. About two years before coming under my care, she first noticed a "lump" above the right groin, which has gradually increased in size. Some time after she noticed a similar growth above the left groin. She was considerably emaciated and looked very ill.

Examination revealed a tumor as large as a child's head in the right iliac region, and a smaller one in the left ovarian region. The tumors seemed to be fixed in the pelvis and to have a broad base of attachment; they were immovable below, but mobile above and semi-fluctuating. Vaginal examination showed them to be so deeply attached in the pelvis and so intimately related to the uterus that I was unable to complete my diagnosis without anæsthesia. The patient was, therefore, placed in bed and ether administered, when it was found that the uterus was elevated by the tumor on the right side, with which it was connected. There was evident fluctuation, though the tumor was thick-walled and very firm, almost hard. The lower surface occupied the position of the broad ligament at the side of the uterus. The same condition existed on the left side, but to a less degree. I diagnosticated sessile cystic disease of both ovaries or broad ligaments, and advised immediate operation, to which the patient gladly assented.

Operation April 13, 1887. When the tumors were exposed they were found to be so closely connected with the womb that they seemed to be one with that organ, which rested as a wedge between them. The Fallopian tubes extended outward over the upper surface of the tumors while the broad ligaments and the greatly distended veins of the pampiniform plexuses were expanded so as to apparently envelop them, the whole presenting a dark, purple appearance, which was not at all reassuring. After separating some slight adhesions on the posterior aspect of the larger tumor and rolling it forward, the nacreous surface common to the multilocular ovarian cyst was exposed to view. Selecting a spot on this free surface because it was less vascular, I plunged a trocar into it, when about a quart of a tarry-looking fluid drained away. A more thorough investigation, which the diminished size of the tumor now afforded, showed it to be adherent to the cæcum also. Previous to beginning the enucleation, I passed a long, blunt needle charged with a double ligature through the expanded broad ligament at its least vascular portion, between the uterus and the tumor, and as far below the Fallopian tube as could be done with safety. One side of the ligature was then drawn up and tied close to the uterus, including within its grasp the tube and vessels. Thus insured against hemorrhage from that source,



I next cut through as far as the ligation extended, and continued the enucleation down to the base of the tumor, and then outward, finally separating it from the head of the colon. There was some bleeding from the numerous veins which were broken, but this was readily controlled by catch-forceps and ligatures.

Attention was now given to the tumor on the left side. This was found to be deeply imbedded in the pelvis and firmly fixed to the uterus, Fallopian tube, descending colon, and rectum. The upper surface was covered with a network of distended veins, some of them as large as a quill. Enucleation of this tumor seemed too hazardous, and hysterectomy was out of the question, for to do the latter the tumor must first be dissected from the colon and the pelvic floor, which was not practicable. I determined, therefore, to evacuate the contents of the cyst by aspiration and then to shell out the lining membrane, or, failing in this, to insert a drainage tube into it. But while endeavoring to select a position for puncture my finger passed into the tumor low down on the posterior surface of the broad ligament. Instantly the pelvis was flooded with a tar-like substance similar to that which had been evacuated from the tumor on the right side. This was removed by sponging as quickly as possible. I then passed my finger through the opening which I had thus accidentally made, and after a careful and gentle dissection succeeded in removing the entire secreting surface of the cyst. Blood was now flowing from the small valvular opening in the broad ligament; but as it was apparently venous I hoped to check it by compressing the now flaccid folds of the ligament; for this purpose several large sponges were inserted and external pressure made upon them while the abdominal sutures were being placed. The sponges were then removed. There was still a slight flow of blood, but as it was doubtless only a venous oozing I concluded to close the wound and trust to pressure and the drainage tube. The patient was placed in bed and the tube carefully watched. During the next two or three hours several teaspoonfuls of quite bloody serum passed through it; afterward there was very little discharge of any character, and within forty-eight hours the tube was removed.

The patient made a slow, but good recovery, and went home six weeks after the operation. She has been entirely relieved of her former suffering, and the lost weight and strength have been regained.

## REPORT OF A CASE OF FIBROID TUMOR OF THE UTERUS,

COMPLICATED BY REPEATED ATTACKS OF PERITONITIS FROM IMPACTION OF THE TUMOR IN THE PELVIS; REMOVED BY LAPAROTOMY AND THE PEDICLE DROPPED WITHOUT CLAMP OR LIGATURE.<sup>1</sup>

MRS. A., æt. 39; married ten years; sterile. She had suffered from dysmenorrhea since puberty, and during the last five or six years has had frequent attacks of pelvic peritonitis. In February of this year she had a violent attack of peritonitis which became general in character and which confined her to bed four months. She was pronounced on several occasions beyond recovery from this illness. She gradually improved, however, and was able to be about the house, but her temperature remained above 100°, sometimes reaching 102°, and she was in continual great suffering from pressure symptoms.

I first saw the patient in August, 1888, when she complained principally of great pain in the left ovarian region, radiating in character. She then had a temperature of 102° in the evening. There was slight distention of the abdomen, and a sensation as though something were wedged in the left pelvic region and pressing upon the urethra, causing retention of urine. The bladder had not been evacuated without the aid of a catheter since March. She was greatly emaciated and had a large bed-sore. On examination the vagina was found

<sup>1</sup> Reprinted from the University Medical Magazine, February, 1889



shortened, the cervix being low down near the vaginal orifice. The body of the womb was anteflexed and crowded against the right side of the pelvis by a mass which extended above the superior strait. The mass was hard, nodular, and excessively tender on pressure. The tumor was surrounded by an exudation of lymph, and slight fluctuation was perceptible.

I diagnosticated sub-peritoneal fibroid tumor, incarcerated in the pelvis and complicated by peritonitis. The symptoms pointed to the probable presence of pus. Immediate operation was advised, but my advice was not accepted.

A few weeks later she had another attack of acute peritonitis, which became general in character. Her temperature reached  $105^{\circ}$ . There were great tympanites, obstruction of the bowels, and vomiting. The patient was in a very precarious condition. I was now urged to operate, but declined to do so under the circumstances, for the following reasons: The patient was almost moribund, with a pulse so rapid and weak that it could not be counted, and a temperature of  $105^{\circ}$ ; the primary cause of the inflammatory condition was the impacted fibroid, the removal of which, under the most favorable circumstances, is one of the most serious operations; and the patient had once recovered from an attack almost as severe. I therefore decided that the slight chance which she might have would probably be lost by the added shock of an operation for the removal of the impacted fibroid. We expected the patient to die within a few hours. But her bowels moved spontaneously, and, as in the former attack, she gradually improved from day to day, and within four weeks was as well as she had been previous to this last seizure. Her temperature, however, remained at about  $102^{\circ}$ , and she still had the same suffering from the pressure symptoms of which she had complained at the beginning.

It was now thought best, in view of the former history of repeated attacks of peritonitis, to remove the tumor.

Operation on October 28th, assisted by Drs. H. C. Bloom and S. M. Crawford. An incision was made in the hypogastrium and two fingers introduced, when it was found that the omentum and intestines were glued firmly to the pelvic organs and upper surface of the tumor. After carefully dissecting among the friable lymph, I came upon a tumor so deeply seated in the pelvis that it was difficult to reach it. Everything except the tumor was so friable that I feared on several occasions that I had ruptured the bowel. A few ounces of very fetid pus, having a decidedly fecal odor, now escaped. I next thoroughly irrigated the pelvic cavity for the purpose of washing away this decomposed material. Everything was so matted together that it was difficult to determine the true condition. The ovaries and tubes could not be found. The intestines were finally separated, and when I began the separation of the tumor from its adhesions I found it almost immovably impacted in the pelvis. The diagnosis of fibroid was confirmed. It seemed as hard as bone.

I first endeavored to dislodge the tumor by pulling and prying with the fingers, but they soon became tired, and I was compelled to give up that method. The tumor was so fixed to the floor of the pelvis and so closely attached to the uterus that it seemed as though it would be impossible to elevate it sufficiently to clamp any pedicle which might be found or to remove the uterus. The patient at this time was in an extreme condition, and I feared that I might be compelled to abandon the operation. But to have done so would certainly have sacrificed her life, and I therefore continued my efforts. I next passed down on my fingers a large vulsellum forceps and fixed it in the upper surface of the tumor. Firm traction was made on this by Dr. Bloom, while I protected the intestines from injury and at the same time used what force I could upon the tumor from below. After working in this way for at least twenty minutes we were finally rewarded by the delivery of the tumor through the incision, when it was found to be closely attached to the side of the womb by a very short pedicle.

The blood-vessels seemed to be so few and the pedicle so short that I decided to cut through its peritoneal surface. After doing this the vessels were clamped with a Wells' forceps, and I then saw that the true pedicle was entirely with-



out blood-vessels. I then severed it with scissors. The tension from below was so great, after the tumor was removed through the incision, that, when the pedicle was severed, the uterine portion was retracted far into the pelvis, out of sight. Careful examination showed that not the slightest hemorrhage was taking place. To have again drawn up the pedicle for the purpose of stitching the peritoneal edges over it, as has been my practice after removal of a fibroid by laparotomy, would have necessitated great traction, if it could have been done at all. I therefore removed one of the hæmostatic forceps, and, after finding that bleeding did not occur, I did the same with the other. Then, making further irrigation and finding that hemorrhage was absent, I closed the abdominal incision around a drainage tube. I felt certain that hemorrhage would not occur, but, at the same time, I trusted to a certain extent to good fortune. There was not a single ligature used.

The patient was now in a very low condition, and it was thought that she would not recover; but we were agreeably surprised. Her temperature four hours after the operation had fallen to 100°, and it did not again rise above that point; and her stomach, which would not before retain anything, now became quiet.

At the end of forty-eight hours I found, much to my chagrin, that flatus was passing through the drainage tube. I had a fecal fistula to contend with! I immediately removed the tube and filled the channel with iodoform. The bowels were kept confined, for it was thought that if the intestinal contents were rendered liquid there would more likely be a leakage. The fistula gradually closed, and the patient has made a remarkably good recovery. She has been entirely free from pain since the operation, but she is not yet able to void her urine without the aid of the catheter, although more than three months have elapsed.

The method of treating the pedicle in this case is of special interest. It has been my custom in the cases in which I have treated the pedicle by the intraperitoneal method, after myomectomy, to follow the plan of stitching the edges of the peritoneal surface over the stump of the pedicle with silk or cat-gut sutures (preferably the former), thereby closing the wound and obviating danger from hemorrhage or sloughing. But to have drawn this pedicle out after it had returned so deeply into the pelvic cavity would have taken considerable time and necessitated great traction on the parts involved. I therefore decided to follow the course described above, and which I believed to be the best for this case. I do not know whether the pedicle has ever been treated, after myomectomy, as I felt justified in treating it in this case, and I do not, of course, advise this plan; but it is often necessary to invent. To have taken the time and made the manipulation which would have been necessary to ligate the pedicle and bring the edges together over the stump would probably have destroyed the remaining vitality of the patient; and, as there was no hemorrhage, it did not seem wise to waste valuable time in following out a prescribed and settled plan. The subsequent history, in the quick and complete recovery of the patient, has proved that the treatment of the pedicle was probably the best for this case.

The case is also of interest because of the repeated attacks of peritonitis, caused by the position of the tumor, and suggests the question whether it would not be better, in cases of pedunculated sub-peritoneal fibroid tumor when located in the pelvis, and where removal would seem to be at all feasible, to operate as soon as diagnosed. Such action would have saved this patient several years of great suffering, in the later months of which she nearly lost her life.

Electricity had been faithfully employed in this case for a period of three months without benefit. Time should not be wasted in endeavoring to cure a case of this character by galvanism, for the position of the tumor (without the uterine wall), is such as to place it beyond the power of this remedy, unless puncture is made; but puncture of this tumor would have subjected the patient to greater risk than removal by laparotomy.